

# United States Patent and Trademark Office

ENITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,978	10/619,978 07/14/2003		Yong-Bae Kim	01-125/1C	7826
24319	7590	03/04/2005		EXAMINER	
LSI LOGIO	CORPO	DRATION	CHEN, KIN CHAN		
1621 BARBER LANE					
MS: D-106			ART UNIT	PAPER NUMBER	
MILPITAS,	CA 950	35	1765		

DATE MAILED: 03/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		10/619,978	KIM ET AL.				
	Office Action Summary	Examiner	Art Unit				
		Kin-Chan Chen	1765				
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the o	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)	Responsive to communication(s) filed on						
		is action is non-final.					
3)□	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Dispositi	ion of Claims						
<ul> <li>4)  Claim(s) 16-18,21 and 22 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 16-18,21 and 22 is/are rejected.</li> <li>7)  Claim(s) 22 is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>							
Applicati	on Papers	,					
9)⊠	The specification is objected to by the Examina	er.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>							
Attachment	(s)						
1) Notice 2) Notice 3) Inform	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 071403	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:					

D

Application/Control Number: 10/619,978

Art Unit: 1765

Page 2

#### **DETAILED ACTION**

#### Specification

### **Priority**

1. For benefit claims under 35 U.S.C. 120, 121 or 365(c), the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of the applications. This should appear as the first sentence(s) of the specification following the title, preferably as a separate paragraph unless it appears in an application data sheet. The status of nonprovisional parent application(s) (whether patented or abandoned) should also be included. If a parent application has become a patent, the expression "now Patent No. \_\_\_\_\_\_" should follow the filing date of the parent application. If a parent application has become abandoned, the expression "now abandoned" should follow the filing date of the parent application.

## Claim Objections

2. Claim 22 is objected to because of the following informalities:

Claim 22 has editorial error. It is two-page long. The last part seems to be a duplicate of claim 21. Appropriate correction is required.

# Double Patenting

Page 3

3. Claims 16-18, 21 and 22 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,2,3,7, and 14 of U.S. Patent No. 6,673,721. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claims 1,2,3,7, and 14 of U.S. Patent No. 6,673,721 substantially teach the instant claims 16-18, 21 and 22. The instant claims differ from claims 1,2,3,7, and 14 of U.S. 6,673,721 by specifying an integrated circuit structure and openings rather than vias. However, it would have been obvious to one with ordinary skilled in the art that vias is one of the most popular structures in the semiconductor device fabrication / integrated circuit interconnection.

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kin-Chan Chen whose telephone number is (571) 272-1461. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton can be reached on (571) 272-1465. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For

Art Unit: 1765

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

March 3, 2005

Kin-Chan Chen Primary Examiner Art Unit 1765

K-C C